III. REMARKS

Claims 1-3, 5-10, 12-17, and 19-22 are pending in this application. By this Amendment, claims 1, 5-7, 9-10, 12-16, and 19-21 have been amended and claims 4, 11, and 18 have been cancelled. These amendments and cancellations are being made to facilitate early allowance of the presently claimed subject matter. Applicants do not acquiesce in the correctness of the objections and rejections and reserve the right to present specific arguments regarding any rejected claims not specifically addressed. Further, Applicants reserve the right to pursue the full scope of the subject matter of the original claims in a subsequent patent application that claims priority to the instant application. Reconsideration in view of the above amendments and following remarks is respectfully requested.

In the Office Action, claims 1-22 are rejected under § 103(a) as being allegedly unpatentable over Elzur (US Publ. No. 2004/0034725, hereinafter, "Elzur") in view of Shah et al. (US Pat. 6,460,080, hereinafter, "Shah"). Applicants respectfully submit that Elzur and Shah do not teach or suggest each and every feature of the claimed invention, and accordingly traverse the rejections for the reasons that follow.

With regard to independent claim 1, Applicants respectfully submit that the combination of Elzur and Shah does not teach or suggest a method for delivering a plurality of RDMA messages including, *inter alia*, "wherein, for RDMA Send type messages, the delivering includes, for each RDMA Send message of a TCP hold, placing a completion queue element (CQE), the CQE including RDMA Send message specific information, in a work queue element (WQE) associated with the respective RDMA Send message and keeping a number of RDMA Send messages in a connection context on a per TCP hole basis." See claim 1. The Office points to paragraphs [0006] and [0009] of Elzur and Col. 5, lines 1-15 of Shah, in combination,

to allegedly teach or suggest this feature of claim 1. See Final Office Action, page 4. Applicants respectfully submit that the cited sections of Elzur and Shah, as well as the balance of these references, neither teach nor suggest the claimed method including the "RDMA Send type messages" feature described above.

At paragraph [0006], Elzur describes general issues in networking applications that may be addressed by RDMA technology over TCP addresses, such as bandwidth and processing power. Elzur further describes direct data placement (DDP), a property of RDMA, which allows incoming network packets to be placed directly into a final destination memory address, thus eliminating the need for intermediate memory copies and other related memory and processor resource demands, thus reducing data copy operations and latency. See Elzur, paragraph [0006]. At paragraph [0009], Elzur teaches that RDMA over TCP further provides flexibility to place information in the designated memory location even when the TCP segment carrying that information arrives out of order, creating a "TCP hole." See Elzur, paragraph [0009]. At Col. 5, lines 1-15, Shah describes posting an application's send and receive requests directly to the send and receive queues. A consumer will then post descriptors and ring the doorbell to notify the NIC that work has been placed in the queue.

However, Applicants contend that none of these cited sections, or the remaining sections, of Elzur and Shah, specifically teach or suggest RDMA Send type messages. Further, assuming *arguendo* that RDMA Send type messages are implicitly taught, neither of the references teach or suggest "placing a completion queue element (CQE), the CQE including RDMA Send message specific information, in a work queue element (WQE) associated with the respective RDMA Send message *and keeping a number of RDMA Send messages in a connection context on a per TCP hole basis*." See claim 1, emphasis added.

Applicants also maintain that Elzur and Shah still fail to teach or suggest "wherein each in-order RDMA message bypasses the reassembly buffer and is sent to an internal data buffer for direct placement to a destination buffer." See claim 1. The Office points to paragraph [0006] of Elzur to allegedly teach or suggest this feature, but, as mentioned above, Elzur describes that "**every** incoming network packet … may be placed directly into a final destination memory address." See Elzur, paragraph [0006], lines 6-8. Since every incoming packet in Elzur is sent to the final destination memory address, Elzur makes no distinction between in-order RDMA messages and out-of order RDMA message in order to determine *which buffer* to send the message to.

In light of these arguments, Applicants submit that Elzur, independently or in combination with Shah, does not teach or suggest each and every element of claim 1.

With respect to independent claims 9 and 16, Applicants note that each of these claims includes features similar in scope to those already addressed above with respect to claim 1. Further, the Office relies on the same interpretations of Elzur and Shah as discussed above with respect to claim 1 and addresses claims 9 and 16 simultaneously with claim 1. To this extent, Applicants herein incorporate the arguments presented above with respect to claims 9 and 16, and respectfully request withdrawal of the rejections of these claims for the above-stated reasons.

With regard to dependent claims 2-3, 5-8, 10, 12-15, 17, and 19-22, Applicants respectfully submit that these claims are allowable for reasons stated above relative to independent claims 1, 9, and 16, as well as for their own additional claimed subject matter. Accordingly, Applicants respectfully request that the Office withdraw the rejections under 35 U.S.C. § 103(a) to claims 2-3, 5-8, 10, 12-15, 17, and 19-22.

IV. CONCLUSION

In view of the foregoing arguments, Applicants respectfully submit that the application is in condition for allowance. Should the Examiner believe that anything further is necessary to place the application in better condition for allowance, he is requested to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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